



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,345	05/30/2001	Radu V. Ionescu	MS163104.2/40062.116USU1	9575

7590 06/16/2004
Homer L. Knearl
Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903

EXAMINER

RUTTEN, JAMES D

ART UNIT	PAPER NUMBER
----------	--------------

2122

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,345

Applicant(s)

IONESCU, RADU V.

Examiner

J. Derek Ruten

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-15 have been examined.

Drawings

2. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: Page 6 line 10 contains the typo "CDE-ROM" which should be -- CD-ROM --.

Appropriate correction is required.

Claim Objections

4. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 5 attempts to redefine the step of exercising which has

Art Unit: 2122

already been defined in claim 1. However, the act of exercising an object with a method and parameters inherently supplies the step of invoking the method, since if the method were not invoked, it could not be exercised. Since the act of exercising an object with a method inherently invokes the method, claims 4 and 1 are not further limited.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2, 8, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 2, 8, and 12 are unclear because the word "cocreate" is not clearly defined in the claims, nor is it clearly defined in the specification. Interpretation has been made generally according to the fourth paragraph under the Detailed Description heading of the specification to include the process of saving an object instantiation in an object store.

8. Claim 2 is indefinite due to lack of punctuation. The phrase "cocreating using information stored in the type library an instance of the object for review" is interpreted to mean --cocreating, using information stored in the type library, an instance of the object for review--

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2122

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent

6,633,888 to Kobayashi (hereinafter referred to as “Kobayashi”).

As per claim 1, Kobayashi discloses:

A method for reviewing operation of software objects in a computer program

(column 24 lines 20-62), *the software objects, methods on the objects and parameters for the methods are stored in a library, the method comprising the acts of:*

retrieving an object for review from an object store to provide a selected object

(column 22 lines 38-40: “In step 2002, the **bean** to be tested is **loaded into the tester** described above using the visual environment add-on, also as discussed above”; also column 11 lines 18-20: “VEA 700 allows access by the visual builder 708 to beans contained in **JAR file 702**, which beans may be the beans created by the bean creator as discussed above”);

retrieving from an input dialog a selected method for exercising the selected

object (column 22 lines 41-42: “Next, in step 2004, the bean is displayed in the workspace window by **selecting it from the palette.**”; Also column 22 lines 30-32: “Testing a **composite bean** typically involves testing the operation of its **methods** and

Art Unit: 2122

bound properties, which, as discussed above include the parameters of the methods.”);

obtaining selected parameters for use in the method for exercising the selected object (column 22 lines 49-53: “Further, as discussed previously, **the method parameters** of the original bean are exposed by the proxy components created from the methods of that bean. Consequently, each method can be tested fully.”; also column 8 lines 23-27: “Each composite component in the application 216 can be tested within the visual builder by means of the universal transport API 206 which allows the code which implements the underlying **objects** and components 202 to be **exercised** under control of the proxy components.”); *and*

exercising the selected object with the selected method using the selected parameters so that the operation of the software object is reviewed (column 22 lines 46-49: “As previously mentioned, when the methods of proxy beans are invoked, they use the universal transport mechanism to invoke the actual component code in order to test the method as set forth in step 2008.”).

0

As per claim 2, the above rejection of claim 1 is incorporated. Kobayashi further discloses: *wherein the library is a type library* (column 8 lines 60-63) *and the method further comprises: cocreating, using information stored in the type library, an instance of*

Art Unit: 2122

the object for review; and storing the instance of the object in the object store (column 22 lines 12-15).

As per claim 3, the above rejection of claim 1 is incorporated. Kobayashi further discloses: *wherein the act of exercising creates another object that may be exercised and the method further comprises: storing the another object in the object store (column 12 line 56 – column 13 line 13).* All further limitations have been addressed in the above rejection of claim 2.

As per claim 4, the above rejection of claim 1 is incorporated. Kobayashi further discloses: *wherein the library is a type library (column 8 lines 60-63) and the act of obtaining comprises: displaying an input dialog for a user to chose parameters using information stored in the type library or already retrieved for use with the selected method exercising the selected object (FIG. 11 element 1160).*

As per claim 5, the above rejection of claim 4 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

As per claim 6, Kobayashi discloses:

A method for testing software objects (column 24 lines 20-62) comprising:

Art Unit: 2122

receiving input dialog selections that specify a selected object and a selected method for operation on the object during testing (FIG. 11; also column 22 lines 38-40 as cited in the above rejection of claim 1);

detecting whether testing of the selected object is complete (column 23 lines 1-3: "If the bean did not pass the test, the operator may then choose to edit the bean as set forth in step 2014.");

*if testing of the selected object is not complete, calling the selected method on the selected object and displaying an input dialog for parameters to provide selected parameters for use by the selected method (column 18 lines 12-15: "The properties window 1155 displays to the user **properties** 1160 and the corresponding property value 1165 associated with **a bean selected** in the workspace window 1140.");*

exercising the selected method on the selected object using the selected parameters from the input dialog so that software objects may be tested for operation with the selected method using the selected parameters (column 23 lines 3-5: "The method then proceeds back to step 2006 where the bean is rerun to retest it.");

As per claim 7, the above rejection of claim 6 is incorporated. Kobayashi further discloses: *creating a library store storing object information defining elements of each software object (column 8 lines 60-63); and retrieving object information from the library store including methods on each object (column 18 lines 11-20).*

As per claim 8, the above rejection of claim 6 is incorporated. Kobayashi further discloses: *wherein the input dialog selections include a cocreate selection indicating an instance of the selected object is to be created and the method further comprises: cocreating an instance of the selected object* (column 22 lines 12-15 and 43-49).

As per claim 9, the above rejection of claim 8 is incorporated. Kobayashi further discloses: *wherein the act of exercising comprises: retrieving selected parameters chosen from the input dialog for parameters; and invoking on the instance of the selected object the selected method and using the selected parameters chosen from the input dialog to exercise the instance of the selected object* (column 22 lines 46-53).

As per claim 10, the above rejection of claim 9 is incorporated. Kobayashi further discloses: *interpreting the result of exercising the instance of the selected object* (column 22 line 66 – column 23 line 3).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi as applied to claim 10 above, and further in view of U.S. Patent 6,067,639 to Rodrigues et al. (hereinafter referred to as "Rodrigues").

As per claim 11, the above rejection of claim 10 is incorporated. Kobayashi does not expressly disclose *logging the result interpreted by the act of interpreting*.

However, in an analogous environment, Rodrigues teaches that a log can be used to store test results (column 9 lines 28-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a log to store results of a test. One of ordinary skill would have been motivated to keep a detailed record of test results to compare and track the progress of a project.

13. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Rodrigues in view of "Comparing Microsoft Transaction Server to Enterprise JavaBeans" by Microsoft (hereinafter referred to as "MTS").

As per claim 12, Kobayashi discloses:

parsing object information into methods and parameters (column 8 lines 35-37:

"Bean compiler 302 **parses** the code and extracts the relevant **methods and parameters.**");

Art Unit: 2122

storing the methods and parameters in a library store (column 8 lines 59-63: "As the beans are created they are inserted into a JAR file 324 by JAR File loader 322. Once all of the beans have been created, another module, the manifest file creator 308, of bean compiler 306 produces a complete **manifest file**, with an ".mf" suffix.");

detecting an input selection indicating each object to be exercised and the method to exercise the object (column 22 lines 30-22: "Testing a **composite bean** typically involves testing the operation of its **methods** and bound properties, which, as discussed above include the parameters of the methods."; also column 22 lines 41-42: "Next, in step 2004, the bean is displayed in the workspace window by **selecting it from the palette.**");

cocreating an instance of the object is to be exercised (column 22 lines 12-15: "With that information specified, in step 1908, the bean tester creates the source code for the composite component, and creates manifest and JAR files for the component in step 1910.");

getting the method and parameters chosen for use with the method to exercise the instance of the object (column 22 lines 49-53: "Further, as discussed previously, **the method parameters** of the original bean are exposed by the proxy components created from the methods of

Art Unit: 2122

that bean. Consequently, each method can be tested fully.”; also column 8 lines 23-27: “Each composite component in the application 216 can be tested within the visual builder by means of the universal transport API 206 which allows the code which implements the underlying **objects** and components 202 to be **exercised** under control of the proxy components.”);

invoking the method with a chosen parameters to exercise the instance of the object to be exercised (column 22 lines 46-49: “As previously mentioned, when the methods of proxy beans are invoked, they use the universal transport mechanism to invoke the actual component code in order to test the method as set forth in step 2008.”); *and*

repeating the detecting, cocreating, getting, invoking and for use in debugging and adjusting the operation of the objects (column 23 lines 3-5: “The method then proceeds back to step 2006 where the bean is rerun to retest it.”).

Kobayashi does not expressly disclose creating a log record of objects that are exercised, or the use of COM objects.

However, Rodrigues teaches a method of saving test results to a log file (column 9 lines 28-31: “The test operations object library 406 receives pre-recorded pseudo-random test suite files or playback files 400, and logs all testing procedures to playback

Art Unit: 2122

files and results to **log files** 402.”). Also, in an analogous environment, MTS teaches that beans (used by Kobayashi) are analogous to MTS COM objects (page 2 last paragraph: “Each **bean** exposes its own Home interface, **analogous** to the **COM** IclassFactory interface, allowing a client to create instances of specific classes.”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rodrigues’ teaching of log files with MTS’ teaching of COM objects in the test system of Kobayashi. One of ordinary skill would have been motivated to test component-based applications to ensure proper execution. Also, one of ordinary skill would have been motivated to store a log of the testing to permit later examination or reproduction of a failed sequence.

As per claims 13-15, the above rejection of claim 12 is incorporated. All further limitations have been addressed in the above rejections of claims 2, 6, and 10, respectively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (703) 605-5233. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2122

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jdr



TUAN DAM
SUPERVISORY PATENT EXAMINER